patterns. These two different x-ray diffraction patterns are indicative of two different solid forms. A comparative study of 4-(6-methoxy-2-naphthyl)-butan-2-one using 80 traditional screening conditions (including crystallization in vials, varying solvents, varying conditions including fast evaporation, slow cooling, and crash cooling) showed only the diffraction pattern of the original solid form reported in the literature.

IN THE CLAIMS:

Please amend claims 1, 7, 16, 26-27, 35, 38-41, 46-48, and 50-54 to read as follows:

1. A method of screening for possible solid forms of a sample, said method comprising the steps of:

disposing the sample on one or more receptacles, where at least one of the receptacles defines a capillary space, and the sample is disposed within the capillary space;

solidifying the sample in or on said receptacles to generate at least one solid form;

analyzing said at least one solid form in a manner wherein the analytical result is indicative of the generated solid form; and

classifying said at least one solid form.

7. The method of claim 1 wherein the sample is placed in at least 100 receptacles defining capillary spaces.

16. The method of claim 13, wherein the spectroscopic analysis is Raman spectroscopy.

26. The method of claim 24 wherein said centrifuging is sufficient to concentrate the generated form.

27. The method of claim 24 wherein two or more samples are centrifuged at different speeds or for different lengths of time.

35. The method of claim 1, further comprising the step of determining whether more than one solid form was generated from said sample.

38. The method of claim 1 wherein the sample comprises a known polymorphic material.

39. The method of claim 1 wherein the sample comprises at least one material that is not recognized as being polymorphic.

40. The method of claim 1 wherein a plurality of samples are screened.

41. The method of claim 1 wherein a second analyzing step is performed on said generated form, said second analyzing step providing data indicative of bioavailability.

46. The method of claim 11, wherein the analyzing step comprises analyzing said at least one solid form by X-ray diffraction analysis using synchrotron radiation as the radiation source for said analysis.

47. The method of claim 11, wherein the step of analyzing said at least one solid form comprises Raman spectroscopic analysis.

48. The method of claim 11, wherein the step of analyzing said at least one solid form comprises analyzing said form without removing it from said capillary tube.

50. The method of claim 1, wherein said classifying step comprises classifying said at least one solid form according to its x-ray diffraction pattern.

51. The method of claim 1, further comprising subjecting a plurality of samples to the screening method, wherein at least two different samples are subjected to different conditions during the solidifying step.

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52. The method of claim 1, comprising the step of dividing the sample into a plurality of sample portions, and subjecting said plurality of sample portions to the screening method, wherein at least two different portions are subjected to different conditions during the solidifying step.

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53. A method of screening a sample, said screening method comprising the steps of:

disposing the sample on a plurality of capillary tubes to generate solids;

centrifuging the plurality of capillary tubes;

solidifying the sample in the capillary tubes;

analyzing the solids in the capillary tubes in a manner wherein the a analytical result is indicative of the solid form of the solids; and

classifying each of the solids according to the solid form of the solids.

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54. The method of claim 53, wherein at least part of said centrifuging step occurs during said solidifying step.

Please cancel claims 34, 37, 42-45 and 49 without prejudice or disclaimer.

Please add new claims 57-80:

57. A method of screening a sample according to its solid form, said screening method comprising the steps of:

disposing the sample on a plurality of receptacles, where at least one of the receptacles defines a capillary space, and the sample is disposed in the capillary space;

generating at least one semisolid from the sample in or on said receptacles;

analyzing the generated semisolid wherein the analytical result is indicative of the form of the semisolid; and

classifying the generated semisolid according to the indicated form.

58. A method of screening a sample, said screening method comprising the steps of:

disposing the sample on a well plate, wherein said well plate defines a plurality of capillary spaces, and the sample is disposed in the capillary spaces;

solidifying the samples in said capillary spaces to generate solids;

analyzing the generated solids wherein the analytical result is indicative of the solid form of the generated solids; and

classifying the generated solids according to the indicated solid form.

59. The method of claim 58, wherein the step of analyzing the generated solids comprises analyzing without removing the generated solids from the receptacle in which the solids were generated.

60. The method of claim 59, wherein the analyzing step comprises x-ray diffraction analysis.

61. The method of claim 60, wherein the analyzing step comprises analyzing said generated solids by X-ray diffraction analysis using synchrotron radiation as the radiation source for said analysis.

62. The method of claim 58, wherein at least some of said capillary spaces are from about 0.1 mm to about 30 mm.

63. The method of claim 58 wherein at least some of said capillary spaces are from about 0.5 mm to about 17 mm.

64. The method of claim 58 wherein at least some of said capillary spaces are from about 0.5 mm to about 7 mm.

65. The method of claim 58, wherein at least some of said capillary spaces are from about 0.5 mm to about 5 mm.

66. The method of claim 58, wherein at least some of said capillary spaces are from about 0.5 mm to about 2.5 mm.

67. A method of generating and detecting possible solid forms, said method comprising the steps of:

generating a melt from a compound, element, or mixture;

disposing the melt on one or more receptacles defining a capillary space, and the melt is disposed in the capillary space;

solidifying the melt to generate at least one solid in or on said receptacles;

analyzing said at least one generated solid in a manner wherein the analytical result is indicative of the solid form of the generated solid.

68. The method of claim 64, wherein the compound, element or mixture is free of a solvent.

69. A method of generating and detecting possible solid forms, said method comprising the steps of:

melting a sample to form a melt;

disposing the melt on one or more receptacles defining a capillary space, wherein the melt is disposed in the capillary space;

forming a crystalline material from the melt in or on said receptacles;

analyzing said crystalline material in a manner wherein the analytical result is indicative of the solid form of the crystalline material.

70. The method of claim 64, wherein the melt is free of solvent.

71. The method of claim 60 wherein the analyzing step comprises transmission x-ray diffraction analysis.

72. The method of claim 14 wherein the analyzing step comprises transmission x-ray diffraction analysis.

73. The method of claim 1 wherein said at least one receptacle that defines said capillary space is made of polymer or glass.

74. The method of claim 57 wherein said at least one receptacle that defines said capillary space is made of polymer or glass.

75. The method of claim 64 wherein said one or more receptacles defining said capillary space is made of polymer or glass.

76. The method of claim 66 wherein said one or more receptacles defining said capillary space is made of polymer or glass.

77. The method of claim 1 wherein said one or more receptacles comprises a well plate.

78. The method of claim 57 wherein said plurality of receptacles comprises a well plate.